From: MCCLINCY Matt
To: DeMaria, Eva

**Subject:** FW: Analyses of water samples for C10-C12 aliphatics

**Date:** Tuesday, October 18, 2016 11:31:25 AM

Eva,

Per earlier email.

Matt

From: HOATSON Scott

Sent: Monday, October 17, 2016 1:43 PM

To: LARSEN Henning; ROMERO Mike; POULSEN Mike Cc: THIESSEN Kenneth; MCCLINCY Matt; FAIRCHILD Ned Subject: RE: Analyses of water samples for C10-C12 aliphatics

## **Question for Scott Hoatson:**

1. Can we review and potentially approve the analytical method developed by APEX, while keeping the specific analytical protocol confidential? APEX is concerned their proprietary method will be used by others. However, a direct conversation between DEQ and APEX labs will be necessary to clarify APEX's specific concerns.

Answer: It can be done. Myself or one of our Organics staff would have to go to Apex and review their SOP and validation data there so we do not retain a copy here at DEQ. We would just need a Q-Time for the efforts.

# Just Planting the Seeds of Zuality Assurance

### **Scott Hoatson**

# **Agency Quality Assurance Officer**

Oregon Department of Environmental Quality

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From: LARSEN Henning

Sent: Monday, October 17, 2016 1:15 PM

To: ROMERO Mike; POULSEN Mike; HOATSON Scott

Cc: THIESSEN Kenneth; MCCLINCY Matt

**Subject:** FW: Analyses of water samples for C10-C12 aliphatics

From: LARSEN Henning

Sent: Monday, October 17, 2016 1:10 PM

**To:** ROMERO Mike; POULSEN Mike; HOATSON Scott **Subject:** Analyses of water samples for C10-C12 aliphatics

I had a good conversation with Kent Patton today regarding the analysis of water samples for C10-C12 aliphatic hydrocarbons. Several questions and concerns came up that I hope to answer so that we can clear the path for use of a modified method that achieves MRLs necessary to demonstrate compliance with Portland Harbor PRGs. Kent identified 4 questions and issues he would like to get resolved before moving forward:

- What carbons do we want measured? Equivalent or True?
- What method should be modified VPH or EPH?
- Can the DEQ lab provide confidentially with respect to review and approval of the modified analytical method?
- They need CH2MHill to commit to a scope of work that covers APEX investment in developing the method. (Note: Kent indicated he could not simply dust off the previous effort from 2 years ago, since the state of Mass published the results of a recent round-robin analytical effort using several different labs to identify MRLs.

**Comments for Mike Poulsen**: Kent indicated that the method they are now utilizing can report out fraction results on an equivalent carbon or true carbon basis. He again wanted us to verify that the results we are interested in are based on an equivalent carbon range and not the true carbon range. To answer this question, we need to know what method was used to quantify fraction concentrations in water during the bioassay testing. If it was a method that reports results on an equivalent carbon basis, than that is what we should use for demonstrating compliance with Portland Harbor PRG. If it is based on truce carbon number than we can specify that the modified VPH analytical method do the same.

#### **Questions for Mike:**

- 1. Can you verify (again) that the PRG used to derive Burt Shepherd's PRG for the C10-C12 aliphatic is based on equivalent carbons?
- 2. Can you tell me whether Burt Shepherd validated predictions of toxicity using bioassays or whether the PRG is simply a theoretical value?
- 3. This time around Kent indicated the fraction could be measured by modifying either the VPH or EPH methods. Since most of the other TPH fractions that we preliminarily identified are in the VPH range, I think this is the method and range to focus on. Let me know your opinion.

# **Question for Scott Hoatson:**

2. Can we review and potentially approve the analytical method developed by APEX, while keeping the specific analytical protocol confidential? APEX is concerned their proprietary method will be used by others. However, a direct conversation between DEQ and APEX labs will be necessary to clarify APEX's specific concerns.

## **Comment for Mike Romero:**

1. APEX needs commitment from CH2MHill for a certain amount of analytical work to make the investment in developing the method worthwhile. Meanwhile, it appears that CH2MHill does not want to commit to APEX until they demonstrate the method is acceptable to DEQ. So, we have a Catch-22 and to break the paralysis, I would discuss the likelihood of approving the method with Scott Hoatson based on his previous discussions with Kent Patton. If it is high, I would communicate that to CH2MHill and encourage them to move forward with asking APEX to develop the method.

Once, Mike P. and Scott H. respond, Mike R. should communicate his expectations to CH2MHill and hopefully they will go forward and collect the 4 data.

Henning

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